



Glennallen to Palmer Spur Line – Alignment / Lands

Deliverable Report

Prepared for:

Alaska Natural Gas Development Authority

Contract Number 05-0418

April 4, 2005

Prepared by:



***ENSTAR Natural Gas Company
401 East International Airport Road
Anchorage, Alaska 99519***

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Introduction

ENSTAR Natural Gas Company (ENSTAR), an Alaska based company, agreed to conduct a Right of Way land analysis of five alternative alignments for the Alaska Natural Gas Development Authority's (ANGDA) proposed 24-inch natural gas pipeline. The alignments are between the communities of Glennallen and Palmer along portions of the Glenn Highway and rural crossings of Private, State and Native Corporation lands. ENSTAR's analysis was conducted to support ANGDA's objective to apply for a "Conditional" State of Alaska Right-of-Way Lease.

One Preliminary Final Alignment and four (4) Alternate Alignments were identified. The alignments are described beginning near Glennallen at the Trans Alaska Pipeline (TAPS) and ending at its connection to ENSTAR's 20-inch pipeline that is located adjacent to the Glenn Highway, near the Parks and Glenn Highway Interchange.

Based on the scope of work agreement of December 2004, the following report will allow ANGDA to successfully apply for the Conditional Right-of-Way Lease.

The following deliverables were agreed upon for this report:

Deliverable 1. Identify types, characteristics and anticipated timelines for permits.

Deliverable 2. Identify BLM Lands for accelerated transfer.

Deliverable 3. Land Ownership of 5 proposed alignments.

Deliverable 4. Develop Excel spreadsheets for all parcels.

Deliverable 5. Based upon "Found Issues" provide recommendations on problem parcels.

Deliverable 6. Work with Federal, State, and Borough lands and utility companies to assist ANGDA in negotiating co-use/co-location of the pipeline in their ROW.

Deliverable 7. Prepare two (2) copies of the report and on CD in MS Word & Excel format. Assist in answering State Right of Way Lease Application questions.

Deliverable specifics and agreed upon exceptions to ANGDA Request For Proposal can be found in the ENSTAR response to RFP ASPS 2005-0400-5142.

Report Methodology

This report summarizes land and title research data that is supported by specific land documentation. The documentation typically includes land conveyance documents, surveys, plats, related governmental agency information, etc. Due to the volume of supporting documentation, these additional records will be provided to ANGDA in alignment binders on a

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more practical date. The referenced binders are entitled ANGDA Alignment Lands Binder Nos. 1 – 8. ENSTAR conducted research using various electronic and paper document data resources from the Matanuska – Susitna Borough, State Recorder's Offices in Palmer and Chitna/Valdez, State DNR Division of Mining, Land & Water, State of Alaska Department of Transportation, Bureau of Land Management, ENSTAR Right of Way, ANGDA, and Ahtna, Inc. (Ahtna) in addition to other private sources.

ENSTAR identified land ownership for a 300 feet wide proposed pipeline right of way alignment within State or Native owned lands, and 100 feet wide along other land ownerships. Land information is presented for the 148 mile Preliminary Final Alignment and four alternate alignments. The Preliminary Final Alignment was selected by ANGDA based upon information provided by various supporting companies.

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The first 11½ miles of the Preliminary Final Alignment crosses lands owned by Ahtna. This alignment, which lies approximately two miles north of the Glenn Highway Right of Way parallels the highway right of way. The Spur Line leaves the Ahtna alignment and enters onto the Glenn Highway Right of Way and continues for almost 50-miles to mile post 122. At mile post 122, more or less, the ANGDA pipeline leaves the highway right-of-way and enters onto an RS2477 right of way that follows the Squaw and Caribou Creek drainages, crosses Chitna Pass, and along the Boulder Creek drainage into the Chickaloon area. From Chickaloon to Palmer Preliminary Final Alignment follows portions of ADL 202787 right of way and existing Matanuska Electric Association easements that cross State and private lands.

In addition to this Preliminary Final Alignment, ENSTAR researched and has provided ownership information for the four alternative alignments. The Preliminary and Alternative alignments are described in the following section: **Pipeline Alignment & Lands Description.**

Limited land ownership information developed by ENSTAR is shown on the Preliminary Final Alignment maps that are being submitted by the engineering contractor, Michael Baker Jr, Inc. The supporting documentation for all alignments are presented in the ANGDA Alignment Lands Binder Nos. 1 – 8. Considering the limited scope of this project, budgetary constraints, an ambitious schedule and constantly changing land title records, some sections of the Preliminary Final Alignment and Alternative Alignments will need updating or additional research.

Pipeline Alignment & Lands Description

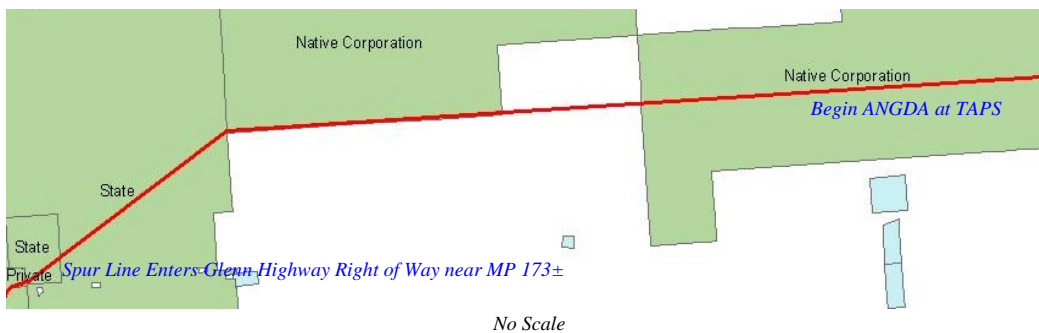
The research and development of this Alignment Lands Project identified the lands that would be traversed by the Spur Line for the Preliminary Final Alignment. Engineering and Environmental projects were also developed for the stated alignment by other consultants. Additionally, this Alignment Lands Project required similar lands research and development for four alternate alignments. The selected ANGDA Preliminary Final Alignment is described as follows.

Preliminary Final Alignment

This alignment includes original Alternate Alignment Nos. 1, 2, 3 & 4.

Ahtna and State Land:

An alignment beginning at the Trans Alaska Pipeline (TAPS) and proceeding west across Ahtna Incorporated lands for approximately 11 ½ miles to Tentatively Approved State Selected Lands, then southwest approximately 3 ½ miles across State Selected lands to the Glenn Highway Right of Way near mile post 173. The following exhibit represents this alignment.



Glenn Highway MP 173 to MP 122, more or less:

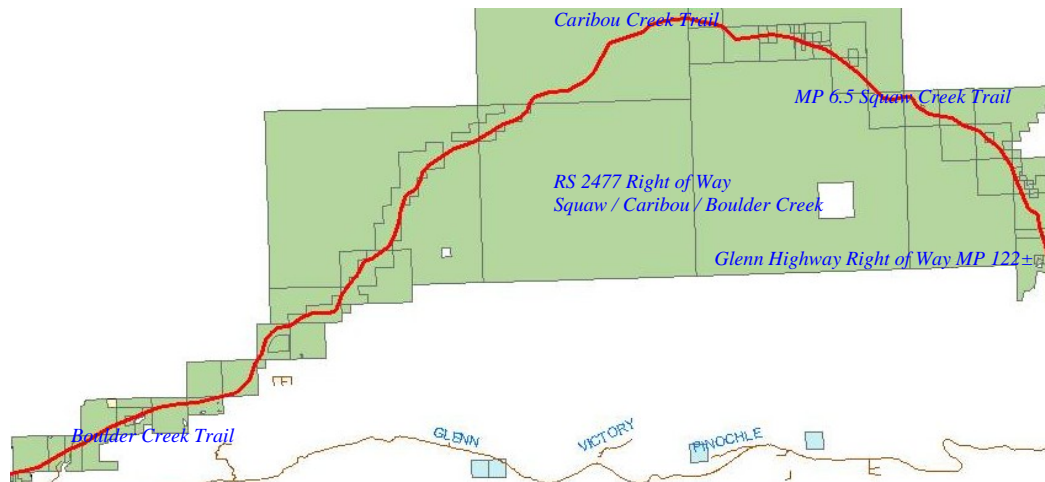
An alignment situated within the Glenn Highway Right of Way beginning near mile post 173 to approximate mile post 122 of the Glenn Highway where the proposed pipeline exits the highway right of way and enters onto lands that are State Selected and Tentatively Approved for conveyance.



No Scale

RS2477 Right of Way, Squaw/Caribou/Boulder Creek Trail

An alignment situated within an RS2477 Right of Way known as Squaw/Caribou/Boulder Creek Trail. The Spur Line leaves the highway right of way near mile post 122 and enters Tentatively Approved lands to be conveyed to the State. This RS2477 Right of Way proceeds along Squaw Creek Trail for approximately 6 ½ miles to Caribou Creek Trail. Caribou Creek Trail and Boulder Creek are part of another RS2477 right of way which is approximately 32 miles long and ends at the Chickaloon-Nelik-Nelchina Trail. The total alignment length is approximately 38 ½ miles.



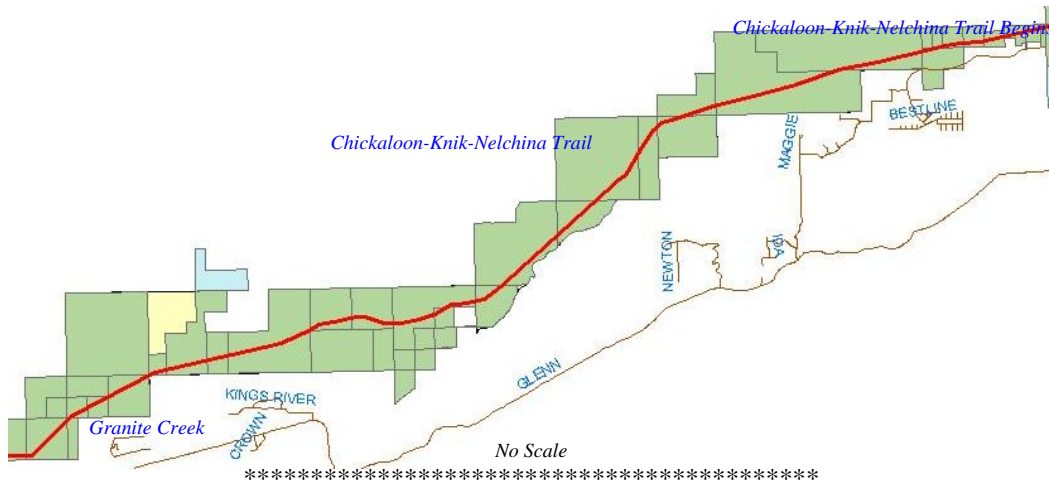
No Scale

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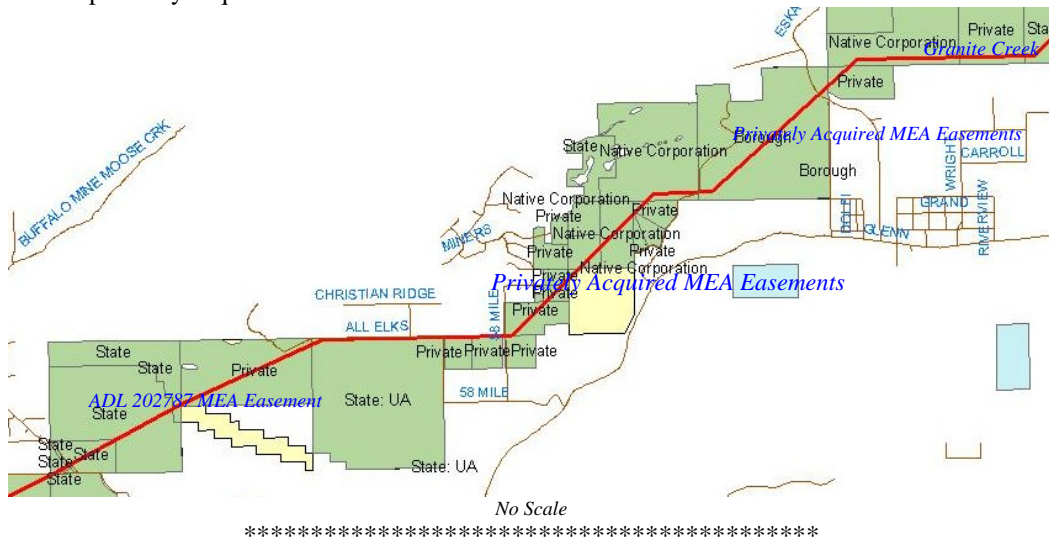
Boulder Creek to Youngs Creek:

An alignment situated within an RS2477 Right of Way known as the Chickaloon-Knik-Nelchina Trail. This alignment proceeds from Boulder Creek to Granite Creek for a distance of approximately 5 ½ miles. This alignment crosses State, Native and privately owned lands.



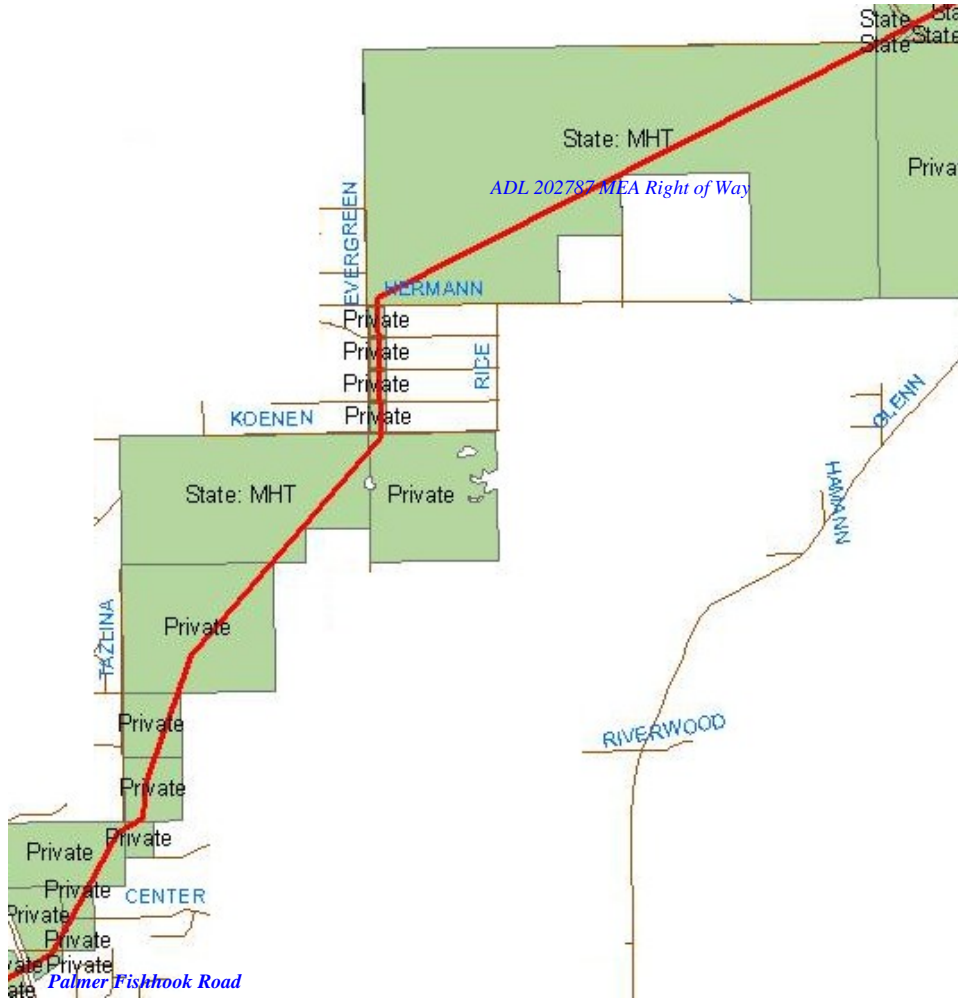
Granite Creek to Moose Creek

An alignment beginning near Granite Creek and ending near Moose Creek. This alignment crosses State, Native, Borough and privately owned lands. A substantial portion of this alignment is situated within Matanuska Electric Association's (MEA) privately acquired easements and also within the State ADL No. 202787



Moose Creek to Palmer Fishhook Road:

An alignment from Moose Creek that continues within the ADL 202787 MEA right of way and then onto private easements to be acquired across privately owned, State and Borough lands.



No Scale

Palmer Fishhook Road to Parks / Glenn Highway to ENSTAR 20-Inch Pipeline:

An alignment that continues from Palmer Fishhook Road on private easements to be acquired across private, State and Borough lands and also along a portion of the Parks and Glenn Highway Rights of Way. This alignment ends at ENSTAR's 20-inch pipeline.

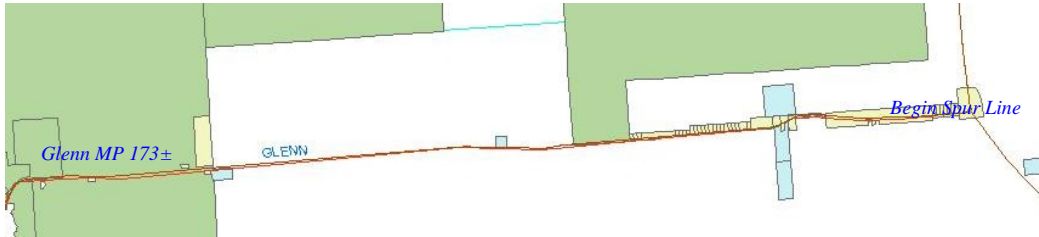


No Scale

Alignments Researched But Not Selected

Glenn Highway MP 189 to MP 173 Alignment Not Selected.

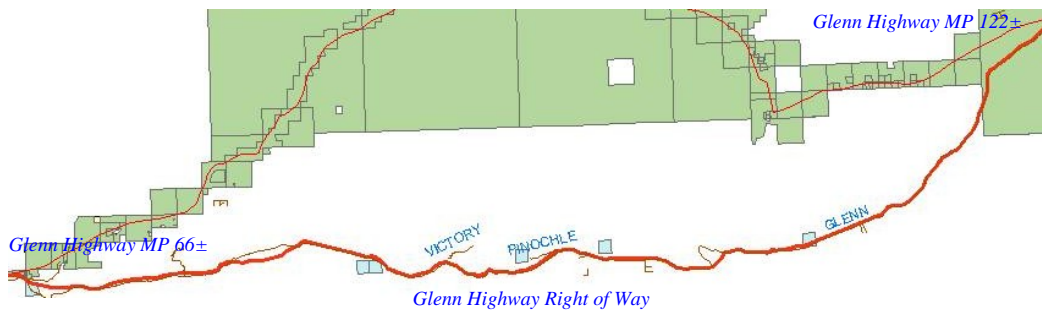
An alignment beginning at the TAPS right of way crossing of the Glenn Highway Right of Way and situated on the north side of the highway right of way, from Glenn Highway MP 189 and ending near mile post 173.



No Scale

Highway MP 122 to MP 66 ± Alignment Not Selected.

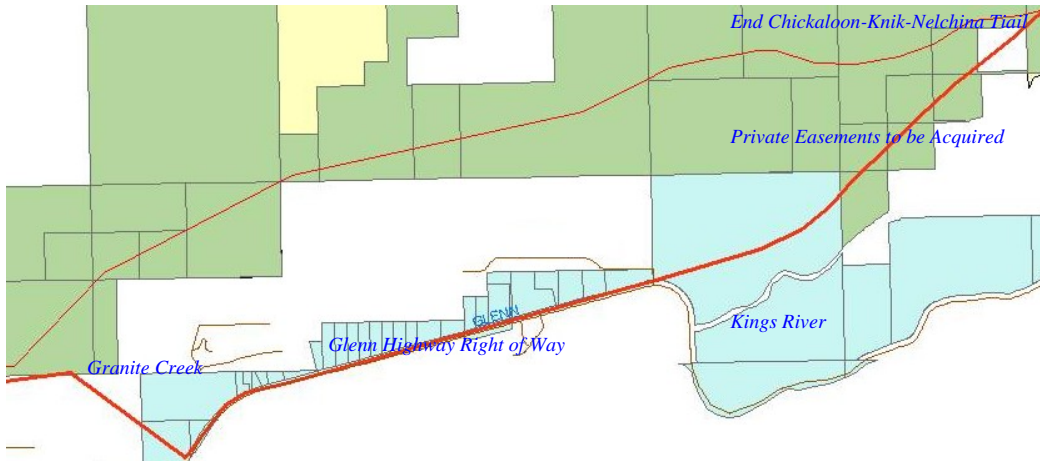
An alignment situated within the Glenn Highway Right of Way beginning near mile post 122 and continuing on the highway to a point near mile post 66.



No Scale

Young Creek & King River to Glenn Highway to Granite Creek Not Selected.

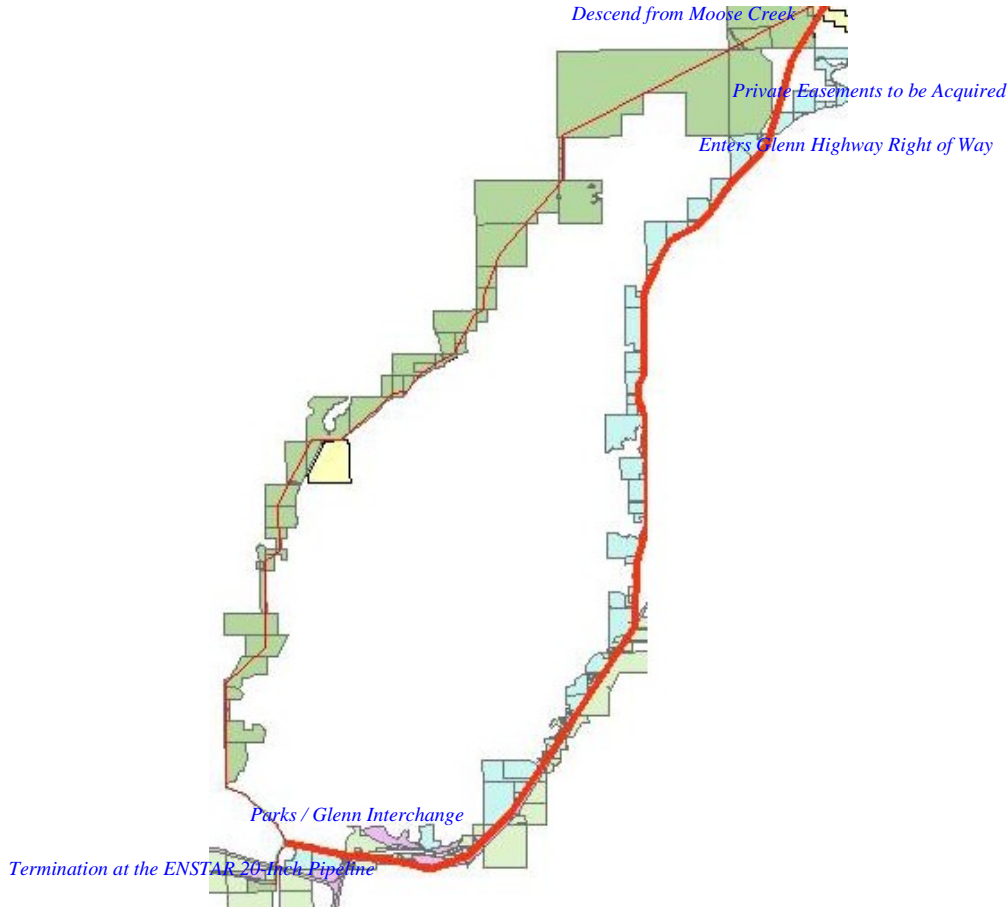
This alignment descends near Young Creek and the King River from the Chickaloon-Knik-Nelchina Trail approximately 2½ miles to the Glenn Highway Right of Way on private and State easements to be acquired. The alignment continues within the highway right of way for approximately five miles to Granite Creek.



No Scale

Glenn Highway Right of Way from Moose Creek to Parks/Glenn Interchange.

An alignment situated within the Glenn Highway Right of Way from Moose Creek to the Spur Line termination and connection point with the ENSTAR 20-inch pipeline near the Parks and Glenn Interchange. The alignment is to be situated on private easements to be acquired across private and State lands. The alignment is situated within the Glenn Highway Right of Way.



No Scale

Deliverable 1. - Identify types, characteristics, and anticipated timelines for permits

ENSTAR has identified the following types of permits necessary for the construction of the natural gas pipeline.

Table 1

	Agency	Permit Title	Estimated Time to Secure	Duration of Permit
1	ADEC	ADEC Excavation Dewatering 9940-DB002	Minimum 3 months	Project period
2	ADEC	DEC Hydrostatic Test Dewatering 9940-DB003	Minimum 3 months	Project period
3	ADEC	Wastewater General Permit	Minimum 3 months	Project period
4	ADEC	Section 401 Water Quality Permit	Minimum 3 months	Project period
5	ADNR	Fish Habitat Permit	Minimum 9 months	Project period
6	ADNR	Temporary Water Use Authorization	Minimum 3 months	Project period
7	ADNR	Coastal Zone Consistency Determination	Minimum 3 months	Indefinite
8	ADOT	Utility Permit	Minimum 6 months	Indefinite
9	ADOT	Lane Closure Permit	3 months	Project Period
10	CVEA	Letter of Non-objection	3 months	Indefinite
11	US Army Corps of Engineers	Section 404 Permit, or Nationwide Permit No. 12 for Utility Discharges	1 year	Indefinite
12	EPA	Notice of Intent for Storm Water Discharges	9 months	Project period
13	FAA	Determination of No Hazard To Air Navigation	3 months	Indefinite
14	ADNR	Right-of-Way Lease for the ANGDA Pipeline	1 year	30 Years +/-

	Agency	Permit Title	Estimated Time to Secure	Duration of Permit
15	Mat Su Borough	Application to Lease or Use Borough Owned Lands	6 months	TBD
16	Mat Su Borough	Nomination for Disposal of Borough Lands and Resources	6 months	TBD
17	Mat Su Borough	Application & Permit to Construct & Maintain Driveway on Public ROW	3 months	TBD
18	Mat Su Borough	Application for Construction within Public Easement & ROW	3 months	TBD

Deliverable 2. Identify BLM lands for accelerated transfer

ENSTAR has identified land parcels that are currently in various stages of conveyance from the U.S. Federal Bureau of Land Management to the State of Alaska, Native Corporations or other interests. BLM currently has 13 Cases pending for transfer of lands to the State of Alaska, Ahtna Inc., Alaska Railroad Corporation, Chickaloon Moose Creek Native Association, Inc., DOT-PF, and Tazlina Inc./Ahtna Inc. Transfer of these lands will facilitate the application and permitting process of the ANGDA natural gas pipeline. A summary of the affected BLM lands awaiting conveyance to the transferees is presented in the following table. Additional detail and supporting documentation is presented in the **ENSTAR Land Alignment Binders Nos. 1, 3, 4 and 6**.

Table 2

Section Number	BLM Case ID	General Description of Applicant for Patent
LEGAL DESCRIPTION		
Township 4 North, Range 6 West, Copper River Meridian		
25, 26, 27, 31, 32, 33, 34, 35	TA0019821230	State of Alaska
Township 4 North, Range 5 West, Copper River Meridian		
26, 27, 28 29, 30	TA0019820428	State of Alaska
Township 4 North, Range 4 West, Copper River Meridian		
13, 14, 15, 16, 17, 18	IC 245 Surf IC 246 SubSurf	Tazlina Inc. / AHTNA Inc.
13, 14, 21, 22, 23, 28, 29, 30	TA0019820629	State of Alaska
Township 4 North, Range 3 West, Copper River Meridian		
13, 14, 15, 16, 17, 18	IC 245 Surf IC 246 SubSurf	Tazlina Inc. / AHTNA Inc.
19, 29, 30, 31, 32, Tract A	TA0019820629	State of Alaska

Section Number	BLM Case ID	General Description of Applicant for Patent
Township 3 North, Range 9 West, Copper River Meridian		
36	TA0019830809	State of Alaska
Township 3 North, Range 8 West, Copper River Meridian		
13, 20, 21, 22, 23, 24, 29, 31, 32	TA0019830809	State of Alaska
Township 3 North, Range 7 West, Copper River Meridian		
1, 2, 8, 9, 10, 11, 16, 17, 18,	TA0019830629	State of Alaska
2, 11	TA0019930324	AK DOT/PF
8, 18, 24	TA0019830809	State of Alaska
Township 3 North, Range 6 West, Copper River Meridian		
8, 9, 16	TA0019830629	State of Alaska
Township 2 North, Range 11 West, Copper River Meridian		
13, 24	TA0019830920	State of Alaska
T2N R11W Copper River Meridian		
24	TA0019830920	State of Alaska
Township 22 North, Range 9 West, Seward Meridian		
15, 19, 26, 27, 28, 29, 30, 35, 36,	TA0019830330	State of Alaska
1, 19, 26, 27, 28, 29, 30, 35, 36	TA0019800617	State of Alaska
Township 22 North, Range 8 East, Seward Meridian		
Tract A	TA0019830330	State of Alaska
Township 21 North, Range 12 East, Seward Meridian		
1, 3, 2, 7, 8, 9, 10, 11, 13, 17, 18, 19, 20, 21, 22, 23, 24	AA 8104-3	AHTNA Inc.
Township 21 North, Range 11 East, Seward Meridian		
19, 20, 21, 22, 23, 24	AA 8104-3	AHTNA Inc.
24	TA0019800617	State of Alaska
25, 26, 27	TA0019930506	State of Alaska
Township 21 North, Range 10 East, Seward Meridian		
5, 6, 8, 9, 10, 14, 15, 16, 22, 24, 27	TA0019800617	State of Alaska
5, 6, 8, 9, 10, 14, 15, 16, 22, 24, 25, 26, 27	TA0019930506	State of Alaska
24, 25, 26, 27	TA0019830330	State of Alaska
Township 20 North, Range 7 East, Seward Meridian		
6	AA11153-23	Chickaloon Moose Creek Native Association Inc.
Township 17 North, Range 1 East, Seward Meridian		
22	IC0019850105	AK Railroad Corp

Deliverable 3. Land Ownership for 5 proposed alignments.

The Preliminary Final Alignment as determined by ANGDA crosses a variety of State, Federal, Native, and private land owners. ENSTAR has performed the necessary research to identify ownership of all properties on the Preliminary Final Alignment and the additional 4 alternative alignments. ENSTAR researched land ownership for 300 feet of the proposed pipeline alignment situated within State or Native owned lands and 100 feet along other land ownerships. Ownership data has been provided to the Michael Baker Jr Inc., the Engineering Contractor, for development of the alignment sheets with limited land data. Property data, including legal description, title history research, tax information, and additional researched data is submitted in the following documents;

Comment: FRASIER/MANNY Adjust to what you actually did

- **ANGDA Alignment Lands Binder # 1**
- **ANGDA Alignment Lands Binder # 2**
- **ANGDA Alignment Lands Binder # 3**
- **ANGDA Alignment Lands Binder # 4**
- **ANGDA Alignment Lands Binder # 5**
- **ANGDA Alignment Lands Binder # 6**
- **ANGDA Alignment Lands Binder # 7**
- **ANGDA Alignment Lands Binder # 8**

Due to the volume of supporting documentation for the alignments, the ANGDA Alignment Lands Binders cannot be provided at this time, but will be provided at a more practical date.

Deliverable 4. Develop Excel spreadsheet for all parcels.

ENSTAR developed an excel file containing land data developed in Deliverable 3. A selection of the data set is included as Attachments A, B, C, & D to this report.

Deliverable 5. Based upon “Found Issues” provide recommendations on problem parcels

ENSTAR has identified the following legal descriptions for preliminary lands alignments lands that will require additional action by ANGDA. Properties requiring additional actions by ANGDA are noted within the Alignment Lands Excel property data file referenced as “remarks”. The remarks suggest possible actions to resolve potential Right-of-Way issues.

Table 3

	Legal Description	Description of “Found Issue”
1	Existing PLO ROW	ADOT / DNR ML&W / JPO / Mat-Su Borough Permits
2	Tentatively Approved	BLM to expedite conveyance
3	Interim Conveyance	BLM to expedite conveyance

Deliverable 6 – Work with Federal, State, and Borough lands and utility companies to assist AGNDA in negotiating co-use/co-location of the pipeline in their ROW.

The following are identified public agencies, native corporation landowners, and utilities with facilities located within the project area.

Table 3

	Land Owner / Agency / Utility	Contact Information	Tel / Fax
1	Alaska Pipeline Company / ENSTAR Natural Gas Company	401 East International Airport Road, Anchorage, AK	Tel 907 334-7736 Fax 907 561-0053
2	Alaska Railroad Corporation	P.O. Box 107500 Anchorage, AK 99510	Tel 907 265-2300
3	AHTNA Incorporated	P.O. Box 649, Glennallen, AK 99588	Tel 907 822-3476 Fax 907 822-3495
4	Bureau of Land Management (BLM)	BLM-Alaska State Office 222 W 7th Avenue #13 Anchorage AK 99513	Tel 907 271-5960 Fax 907 271-3684
5	Chickaloon Moose Creek Native Association Inc.	PO Box 1105 Chickaloon, AK 99674	Tel 907 745-0707 Fax 907 745-7154
6	Cook Inlet Region Incorporated (CIRI)	P.O. BOX 93330, Anchorage, AK 99509-3330	Tel 907 274-8638 Fax 907 279-8836
7	Cooper Valley Electric Association (CVEA)	CVEA P.O. Box 45 Glennallen, AK 99588	Tel 907 320-8340
8	Cooper Valley Telephone Cooperative (CVTC)	329 Fairbanks Street, P.O. Box 337 Valdez, AK 99686	Tel 907 835-2231 or 800 478-6612
9	Matanuska Electric Association (MEA)	P.O. Box 2929, Palmer, AK. 99645	Tel 907 761-9300
10	Matanuska-Susitna Borough	350 E. Dahlia Ave, Palmer, AK 99645	Tel 907 745-4801
11	Matanuska Telephone Association (MTA)	480 Commercial Drive Palmer, AK 99645	Tel 907 745 3211
12	State of Alaska Department of Transportation and Public Facilities (DOT-PF)	Central Region Anchorage Office 4111 Aviation Drive Anchorage, AK 99502 Northern Region Fairbanks Office 2301 Peger Road Fairbanks, AK 99709-5399	Tel 907 269-0700 Fax 907 248-9456 Tel 907 451-2385 Fax 907 451-5411



	Land Owner / Agency / Utility	Contact Information	Tel / Fax
13	Tazlina Inc.	Ahtna, Incorporated P.O. Box 649, Glennallen, AK 99588	Tel: 907 822-3476 Fax: 907 822-3495

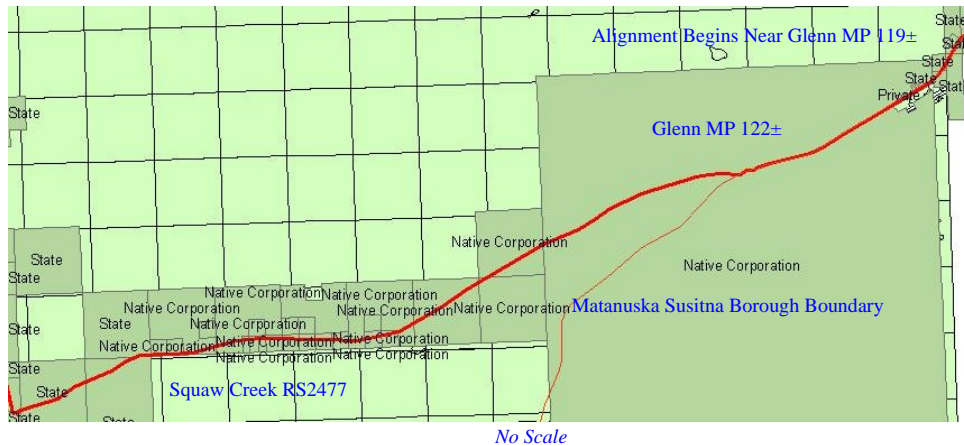
Deliverable 7. Prepare two (2) copies of the report and on CD in MS Word & Excel format. Assist in answering State Right of Way Lease Application questions.

Report provided hard copy and electronically on CD.

Additional ANGDA Requested Land Data:

Glenn Highway MP 119 ± to MP 122±, then enters Squaw Creek :

Lands within this exhibit are Tentatively Approved to be conveyed to the State, and Interim Conveyed to Native Corporations. These lands are situated between the Glenn Highway MP 119± and 122±, and along Squaw Creek, an RS2477 Right of Way. The following table lists the subject lands that require expedited BLM Conveyance.



LEGAL DESCRIPTION	PENDING PATENTEE	PATENT PENDING
Township 21 North Range 10 East Seward Meridian		
1Sec. 25-27	State of Alaska DNR	TA0019930506
2Sec. 25-27	State of Alaska DNR	TA0019930506
3SESE Sec. 27	State of Alaska DNR	TA0019930506, TA0019830330
Township 21 North Range 11 East Seward Meridian		
4Sec. 24	State of Alaska DNR	TA0019800617
5Sec. 22	AHTNA Inc.	AA 8104-3
6Sec. 13	AHTNA Inc.	AA 8104-3
7Sec. 24	AHTNA Inc.	AA 8104-3
8Sec. 23	AHTNA Inc.	AA 8104-3
9SESE Sec. 21	AHTNA Inc.	AA 8104-3
10Sec. 20	AHTNA Inc.	AA 8104-3
11SESE Sec. 20	AHTNA Inc.	AA 8104-3
12W2SWSE Sec. 20	AHTNA Inc.	AA 8104-3
13W2SWSE Sec. 20	AHTNA Inc.	AA 8104-3
14E2SWSE Sec. 20	AHTNA Inc.	AA 8104-3
15Sec. 19	AHTNA Inc.	AA 8104-3
16SESW Sec. 19	AHTNA Inc.	AA 8104-3
17SWSW Sec. 19	AHTNA Inc.	AA 8104-3



Township 21 North Range 12 East Seward Meridian		
18	PTN Sec. 1,2,7-11,17,18; Lot 2 & 1B USS 3944	AHTNA Inc. AA 8104-3
19	SWSW Sec. 21	AHTNA Inc. AA 8104-3
20	SESW Sec. 22	AHTNA Inc. AA 8104-3
21	SESW Sec. 21	AHTNA Inc. AA 8104-3
22	SWSE Sec. 21	AHTNA AA 8104-3
23	SWSE Sec. 22	AHTNA AA 8104-3
Township 22 North Range 9 East Seward Meridian		
29	Sec. 19, 26-30, 35, 36	State of Alaska TA0019830330
30	NWNW Sec 15	State of Alaska TA0019830330
31	SWNW Sec. 28	State of Alaska TA0019830330
32	SENW Sec. 28	State of Alaska TA0019830330
33	NWNW Sec 27; NENE Sec 28	State of Alaska TA0019830330
34	NENW Sec. 28	State of Alaska TA0019830330
Township 2 North Range 11 West Copper River Meridian		
36	PTN E2 Sec. 13	State of Alaska TA0019830920
37	PTN E2 Sec. 24	State of Alaska TA0019830920
38	Gov. Lot 2;	State of Alaska TA0019830920
39	Gov. Lot 1	State of Alaska TA0019830920